1	2	3
7.	ANGRAU RRS Jagtial (AP)	2000
8.	OUAT Bhubaneswar (Orissa)	2002
9.	BAU Ranchi (Jharkhand)	1972
10.	CSKHPKV Palampur (H.P)	1972
11.	GBPUA AND T Pantnagar (Uttarakhand)	1971
12.	JAU Junagadh (Gujarat)	1996
13.	Dr. PDKV, Akola (Maharashtra)	1996
14.	KAU Pattambi (Kerala)	1996
15.	IGKV Raipur (Chhatisgarh)	1996
16.	MPUA and T Udaipur (Rajasthan)	1996
17.	MPKV Parbhani (Maharashtra)	1996

Deleterious effects of chemical fertilizers

9. DR. GYAN PRAKASH PILANIA:
SHRI LALIT KISHORE CHATURVEDI:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether any study has been undertaken to access deleterious effects on soil of excess, injudicious continuous use of chemical fertilizers/insecticides/ pesticides;

(b) if so, findings thereof;

(c) the secenario of consumption of chemical fertilizers per hectare in India/ States, and advanced countries;

(d) steps taken to educate farmers about judicious use of chemical fertilizers and to prompt them to use organic source of nutrients instead;

(e) the details of Government policy and recommendations of National Agriculture Commissions in the above context; and

(f) the amount of subsidy burden for chemical fertilizers Central Government has to bear annually?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA): (a) and (b) Yes, Sir. Indian Council of Agricultural Research has been conducting a long term study on the effects of balanced application of fertilizer nutrients on soil health and crop productivity in different agro-ecological conditions. ICAR has reported that continuous use of nitrogen fertilizer alone has deteriorated the soil health and productivity. Due to their persistent nature some pesticides, such as organochlorines, carbamates, organo-phosphates remain in

soil and get leached to under groundwater, which contaminate the crops. Some common pesticides have an adverse effect on nitrogen fixing bacteria. The pesticides also have effect on endemic microorganisms and arthropods of the soil. Some contaminants alter plant metabolism and thus reduce the crop yield.

(c) The estimated per hectare. Consumption of chemical fertilizer in the country is 117.07 kg/ha. Statewise per hectare consumption has been depicted in Statement (*See* below) consumption of fertilizer in other advanced countries is as under:-

Name of the Country	kg/ha.
China	289
Japan	363
Denmark	151
France	210
Netherland	509
UK.	305

(d) The Government is promoting soil test based balanced and judicious use of chemical fertilizers, bio-fertilizers and locally available organic manures to maintain soil health and its productivity. The Centrally Sponsored Scheme Balanced and Integrated Use of Fertilizer provides for strengthening of soil testing facilities in the country and setting up of compost plants for conversion of biodegradable waste into manure. This Centrally Sponsored Scheme is now being subsumed with "National Project on Management of Soil Health and Fertility" under which a large number soil and fertilizer testing laboratories are proposed to be set up in the XI Plan period. The scheme also envisages capacities building, creation of data banks/soil maps and promotion of Integrated Nutrient Management. In addition to this, *'National Project on Organic Farming'* is being implemented under which farmers are being educated regarding use of Organic Manure.

(e) The National Policy for Farmers, 2007, which is based on the recommendations of National Commission on Farmers, contains provisions for appropriate production and marketing of bio-fertilizer and organic manures to promote their use for improving and maintenance of soil health and introduction of environmentally effective pesticides and promotion of Bio Pesticides and organic Farming.

(f) Subsidy burden for Chemical Fertilizer for the year 2007–08, 2008–09 (estimated) and forecast for the year 2009–10 is as under:

Rs. in Crores

Actual 2007–08	Estimated 2008–09	Forecast 2009–10
40,338	119,772	141,223

Statement

Per hectare Fertilizer Consumption (N+P+K) during 2007—08 based on 2005—06 provisional gross cropped area.

State/U.T.	Kg./ha
Andhra Pradesh	199.64
Karnataka	115.71
Kerala	69.76
Tamil Nadu	178.29
Gujarat	143.60
Madhya Pradesh	66.39
Chhattisgarh	76.90
Maharashtra	103.11
Rajasthan	45.47
Haryana	187.63
Himachal Pradesh	53.15
Jammu and Kashmir	71.78
Punjab	209.99
Uttar Pradesh	149.61
Bihar	162.81
Orissa	51.85
West Bengal	144.21
Arunachal Pradesh	2.73
Assam	57.34
Tripura	41.24
Manipur	85.25
Meghalaya	15.81
Nagaland	2.17
Mizoram	39.90
All India	117.07

Encouragement for cultivation of organic food

10. DR. GYAN PRAKASH PILANIA
SHRI LALIT KISHORE CHATURVEDI :

Will the Minister of AGRICULTURE be pleased to state:

(a) the cultivation, production and sale scenario of 'organic food' in the country;

(b) the steps Government is taking to familiarise the farmers about it;

(c) the steps Government is taking to popularize and switchover to organic food;

(d) the export potential of 'organic food':

(e) the schemes/incentives to encourage its cultivation; and

(f) the comparative profit margin to farmer, in cultivation of one hectare of wheat, by use of chemical fertilizers *vis-a-vis* organic manure?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI KANTILAL BHURIA): (a) As on March 31, 2008, total certified area under organic cultivation is about 4.01 lakh hectares in the country. Estimated production under certified organic management during 2007–08 was 9.60 lakh metric tones. At present no record is available regarding sale of organic food.

(b) and (c) To familarise the farmers about organic cultivation, a National Project on Organic Farming (NPOF) has been taken up from October 2004 under which farmer's trainings on organic farming, field demonstrations on organic inputs, field demonstrations on enriched biogas slurry on farmers fields, creating awareness through seminars/exhibition and publicity through print and electronic media are being organized.

Although, the Government is popularizing organic farming among farmers, there is no proposal to completely switchover to organic food.

(d) Global market for organic products is estimated as US $ 38.6 Billion (IFOAM Annual Report 2008). India's export has grown from Rs. 6.1 crore in 2002-03 to Rs. 301 crore in 2006-07, which is about 0.2% of global market. Thus, there is immense potential for exports.

(e) Apart from trainings, demonstrations, seminars/exhibitions and publicity through print and electronic media the other incentives being provided to encourage organic cultivation under the National Project on Organic Farming are:-

(i) Capacity building for promotion of organic farming through service providers;

(ii) Setting up of organic input production units of fruit/vegetable waste compost units, bio-fertilizer production units and vermi-culture hatcheries; and

(iii) Market Development and promotion.

Government is also implementing a Centrally Sponsored Scheme on National Horticulture Mission (NHM) in the country from 2005-06 under which promotion of organic farming has been included as one of the components and financial assistance is being provided for organic cultivation of horticultural crops, setting up of vermi compost units and for organic farming certification.

(f) On an average, organic commodities can be produced and sold at premiums ranging from 35-70 per cent or more. The cost of wheat cultivation by using organic manures (produces on farm) is at par with the same using chemical fertilizers.